Total Force
Human Capital Strategy
Planning Series

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Millington, TN
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Building Shore Human Capital Objects Strategy Meeting

Content, Container, Context

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Agenda

- SkillObjects and Human Capital Objects Definition

- Creating SkillObjects and HCO's

- Total Force Effort Essential to Sea Warrior Success

- Human Capital Content Data Formation Update

- Shore Jobs and Industry Jobs are Similar

- The <u>Content</u>, <u>Container</u>, <u>Context</u> Grand Challenge

Lexicon and Process Alignment

SkillObjects and HCO's Enable Planners to Meet TF-HCS Objectives

Success Statement:
Central to Total Force Human Capital Strategy and Sea Warrior (MPT&E) success is a shift from a "*task/equipment-centric*" to a "*SkillObject/HCO/Competency*" operation environment.

Problem Statement:
The emerging warfighting/peacekeeping environment demands descriptors of work, worker and workplace to be standardized and usable across the all workforce development functions *(manpower, training, education, recruiting, NTA capability, etc.)*

The "AS-IS" workforce development environment is transitioning to the "TO-BE" while the tail (descriptors and framework) are in a blended Rate/Rating/NEC and Job Family, Job, Critical Work Function, SkillObject and work context format.

The blend of AS-IS and TO-BE workforce descriptors presents significant challenges to the workforce development planners.

Solution Strategy:
Provide workforce practioners a clear & simple process to align work requirements to positions.
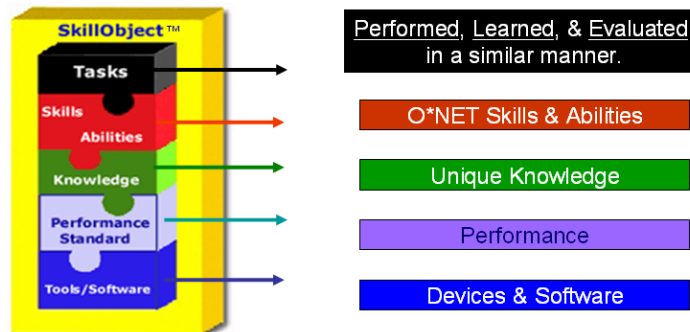
Strategy should assure all activities are forward compatible realizing there will be multiple spirals required to meet desired end-state.

Definitions

SkillObject and Work Elements:

1. SkillObject: An observable occupational skill containing unique knowledge, Skills, Abilities, Tools tasks and resources (KSATTR) at the JOB level and Context work elements (context identifier, specialty KSA's, sub-tasks, procedures, etc.) where applicable.

2. SkillObjects are the **smallest** unit of analysis to define work.

3. SkillObject KSA's are **enablers** and not **measures** of performance.

4. Context work elements: position specific characteristics that delimit the SkillObject functionality.

SkillObject ™

Tasks	Performed, Learned, & Evaluated in a similar manner.
Skills / Abilities	O*NET Skills & Abilities
Knowledge	Unique Knowledge
Performance Standard	Performance
Tools/Software	Devices & Software

Definitions

Human Capital Objects:

Human Capital Object (HCO) - A Human Capital Object (HCO) is a multifaceted collection of work, worker and workplace data content requirements in a specific environment or set of environments, that will be used to support Navy business processes.

Human Capital Object (Individual) (HCO(I)) - An HCO(I) is the individual's existing abilities and attributes to do work.
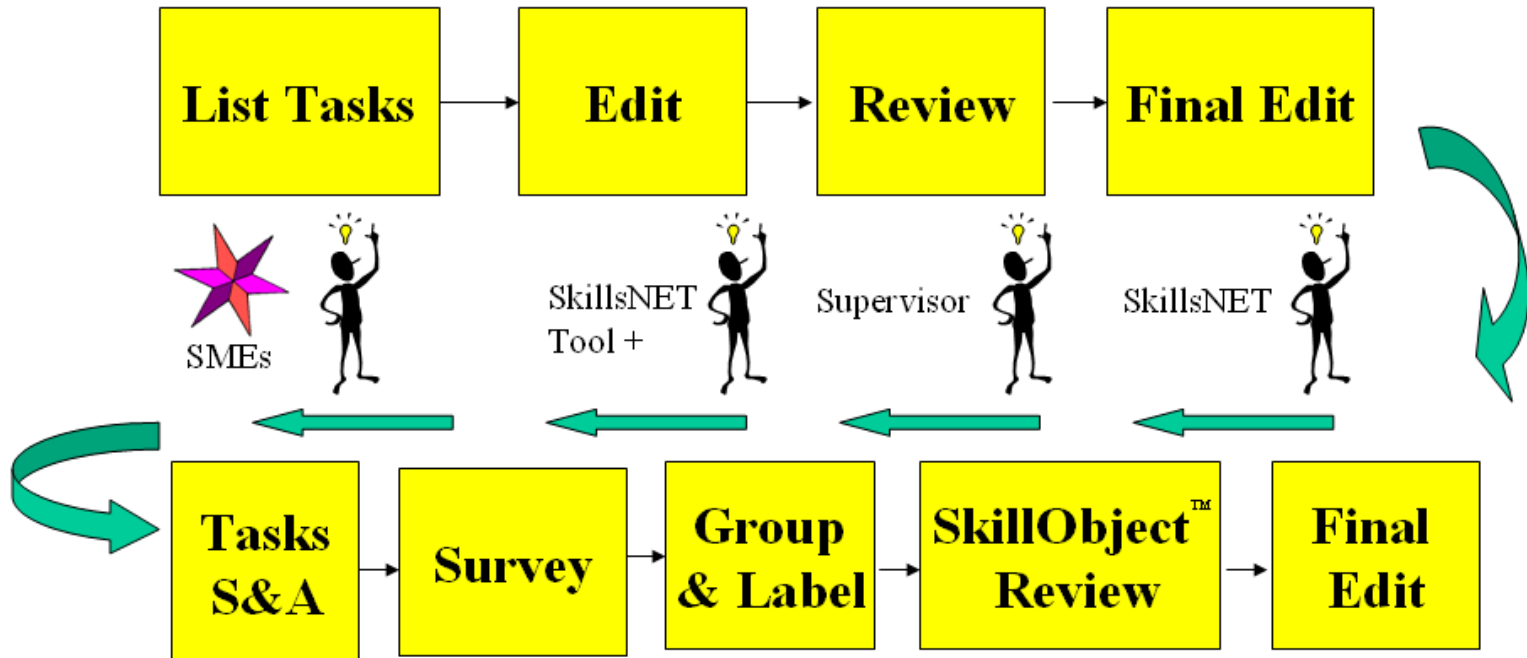
Human Capital Object (Requirement) (HCO(R)) - An HCO(R) is the set of work and work place requirements assigned to a position.

Content Creation

SkillObjects:

Defining Work and KSATs

| List Tasks | → | Edit | → | Review | → | Final Edit |

SMEs | SkillsNET Tool + | Supervisor | SkillsNET

| Tasks S&A | → | Survey | → | Group & Label | → | SkillObject™ Review | → | Final Edit |

SkillObject and ILE End-to-End IA Use Case

The sample use case is based on the Job Family "**Radar Operations**", job title "**Air Traffic Controller**", and position title "**Carrier Air Traffic Control Center (CATCC) Approach Controller**" SkillObject data with "**SPN-43 Approach Radar**" as Context.

Based on the job analysis, there are 43 SkillObjects™ in the Air Traffic Controller job. They are listed below. Of the 43 SkillObjects, 28 have relevance to the position of Carrier Air Traffic Control Center (CATCC) Approach Controller.

Air Traffic Control Supervision
Air Traffic Control Supervision - Sea
Air Traffic Control Supervision - Shore
Airspace Coordination Procedures
Clearance Procedures
Emergency Control Procedures
Emergency Procedures
Equipment Management
Equipment Operations
Flight Planning Supervision
General Procedures
General Procedures - Sea
General Procedures - Shore
General Procedures - Tower
General Procedures Flight Planning - Shore
Inter-Facility Coordination Procedures
Intra-Facility Coordination Procedures
Media Management
Message Handling
Non-Control Coordination Procedures
Non-Control Tactical (Expeditionary)
Non-Radar Procedures

Program Management
Program Management - Sea
Program Management - Shore
Publication Management
Radar Procedures
Radar Procedures-Sea
Radar Procedures-Shore
Routine Administration
Routine Transmissions
Safety Alerts and Advisory Procedures
Separation Procedures
Special Handling Procedures
Special Use Airspace
Status Board Operations
Tactical (Expeditionary) Procedures
Taxi and Ground Movement Procedures
Tower Supervision
Training
Wake Turbulence Tower Procedures
Wake Turbulence Procedures
Weather Reporting

Radar Procedures-Sea SkillObject will be used to illustrate job and context content.

Radar Procedures-Sea SkillObject

The job analysis yielded a total of 265 task statements for the job of Air Traffic Controller. Fifteen of the tasks were chosen from the entire list of tasks and are presented below.

1. CONDUCT AIR TRAFFIC CONTROL RADAR FINAL SURVEILLANCE APPROACHES
2. CONTROL AIRCRAFT USING PRECISION APPROACH LANDING SYSTEMS (PALS)
3. CONTROL INSTRUMENT CONTROLLED LANDING SYSTEM (ICLS) APPROACHES
4. CONTROL PRECISION APPROACH RADAR (PAR) APPROACHES
5. OPERATE AIR TRAFFIC CONTROL EQUIPMENT
6. PERFORM AIR TRAFFIC CONTROL AIRCRAFT EMERGENCY PROCEDURES
7. PERFORM APPROACH PROCEDURES
8. MAINTAIN AIR TRAFFIC CONTROL RELATED FORMS
9. MANAGE LOGS AND RECORDS
10. PROCESS POST FLIGHT OPERATIONS INFORMATION
11. ISSUE ROUTINE SHIPBOARD TRANSMISSIONS
12. OBTAIN CURRENT AIRCRAFT FUEL STATES
13. ISSUE AIR TRAFFIC CONTROL TRAFFIC ADVISORIES
14. APPLY AIR TRAFFIC CONTROL VISUAL SEPARATION PROCEDURES
15. SEPARATE AIRCRAFT VERTICALLY

The proficiency level required for each SkillObject varies by expertise level over RAJM. As an example, A SkillObject may require a proficiency of monitoring 5 planes concurrently for a J, and 10 for M. Likewise, all SkillObjects are not performed by all levels of expertise. The **performance statement** will indicate proficiency requirement and map to **performance objective(s)**.

For each question below, we are providing a specific example using the job of an "Air Traffic Controller", in the "Radar Operations" Job Family. The specific position is that of "Carrier Air Traffic Controller Center (CATCC) Approach Controller" with a Context of a "SPN-43 Approach Radar"

SkillsNET Job (Level I)
and
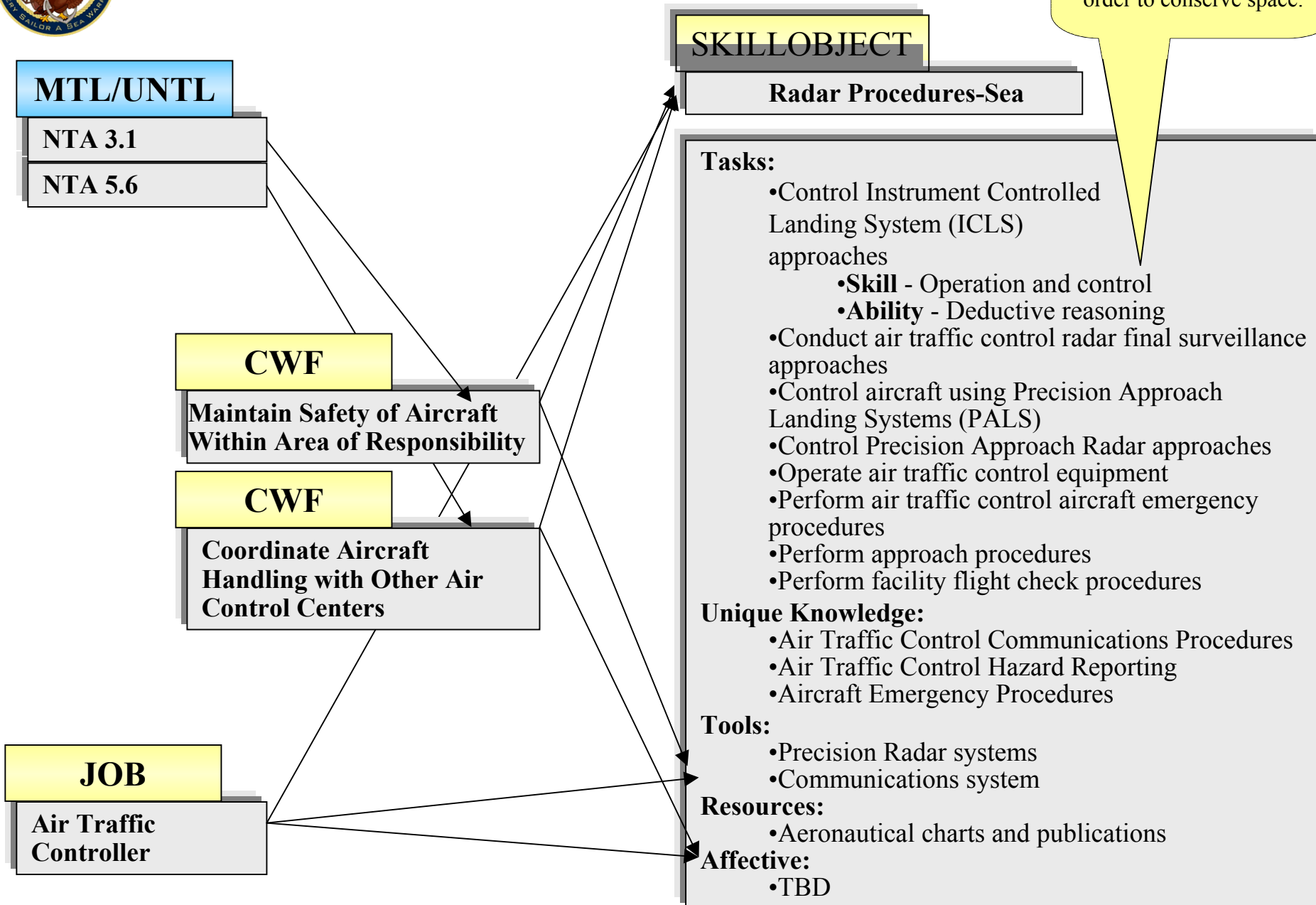# Context (Level 2)
Data Architecture.

Use Case Example:

Radar Procedures-Sea SkillObject

SkillsNET® Level I Architecture

MTL/UNTL

CWF

Major responsibilities that an individual must fulfill in order to achieve the work required for the job/role that enables mission accomplishment

CWF

CWF

SKILLOBJECT (AJM – Performance Objects/Performance Statements)

Contains logically grouped knowledge, skills, abilities, tools, resources, tasks (2-10), and affective traits that are required to successfully perform a job. Re-usable detailed description what people do in accomplishing work

Task$_1$ → Skills
→ Abilities
Task$_2$ → Skills
→ Abilities
Task$_3$ → Skills
→ Abilities

Unique Knowledge

Tools

Resources

Affective

Normative Data—
Skill Level
Knowledge Level

JOB

Collection of defined SkillObjects aligned with specific work functions to be performed by an individual

SKILLOBJECT

SKILLOBJECT

From Surveys of Representative Sample Population

* SkillObject is a Trademark of SkillsNET—Navy current license allow internal unrestricted, internal use of term and data architecture

Use Case I Example

MTL/UNTL
- NTA 3.1
- NTA 5.6

CWF
- Maintain Safety of Aircraft Within Area of Responsibility

CWF
- Coordinate Aircraft Handling with Other Air Control Centers

JOB
- Air Traffic Controller

SKILLOBJECT

Radar Procedures-Sea

Tasks:
- Control Instrument Controlled Landing System (ICLS) approaches
  - **Skill** - Operation and control
  - **Ability** - Deductive reasoning
- Conduct air traffic control radar final surveillance approaches
- Control aircraft using Precision Approach Landing Systems (PALS)
- Control Precision Approach Radar approaches
- Operate air traffic control equipment
- Perform air traffic control aircraft emergency procedures
- Perform approach procedures
- Perform facility flight check procedures

Unique Knowledge:
- Air Traffic Control Communications Procedures
- Air Traffic Control Hazard Reporting
- Aircraft Emergency Procedures

Tools:
- Precision Radar systems
- Communications system

Resources:
- Aeronautical charts and publications

Affective:
- TBD

SkillsNET Level II Architecture

Job Work Elements   **Context**   **Position Work Elements**

SKILLOBJECT

Task$_1$
Task$_2$
Task$_3$
Unique Knowledge
Tools
Resources
Affective

Normative Data—
Skill Level
Knowledge Level

CONTEXT

Platform

System

Environment

Other

System 1

System 2

System 3

Sub Task
Sub Task
Sub Task

Step 1
Step 2
Step 3
Step 4

Sub Task
Sub Task

Step
Step
Step

Sub Task
Sub Task
Sub Task
Sub Task
Sub Task

Step 1
Step 2
Step 3
Step 4
Step 5

Filter for Level II Data Elements

Use Case Level II Example

SKILLOBJECT

Radar Procedures-Sea

C O N T E X T

- Conduct air traffic control radar final surveillance approaches
- Control aircraft using Precision Approach Landing
- **Control Instrument Controlled Landing System (ICLS) approaches**
- Control Precision Approach Radar (PAR) approaches
- Operate air traffic control equipment
- Perform air traffic control aircraft emergency procedures
- Perform approach procedures
- Perform facility flight check procedures

System

SPN-43 Approach Radar

System

XXXXXX

System

XXXXXX

Sub Task

Perform air traffic control recovery operations as a final controller

Sub Task

Control aircraft in accordance with naval air training and operating procedures

Sub Task

XXXXXXXXXXXX

Steps

| Verify approach |
| Verify airspace |
| Etc. |

Steps

| Step 1 |
| Step 2 |
| Etc. |

| Step 1 |
| Step 2 |
| Step 3 |
| Step 4 |
| Step 5 |

Content Creation

Human Capital Content Model

Content Creation

NOTE: The arrows represent data relationships (or references)

Unit A

Team A

Team B

Position 1

Position 2

Position 3

Position 4

HCO 1

HCO 2

HCO 3

HCO 4

Point of Execution Data

Personnel Data

Authoritative Data

Navy SMS
SkillObject and Work Element Data
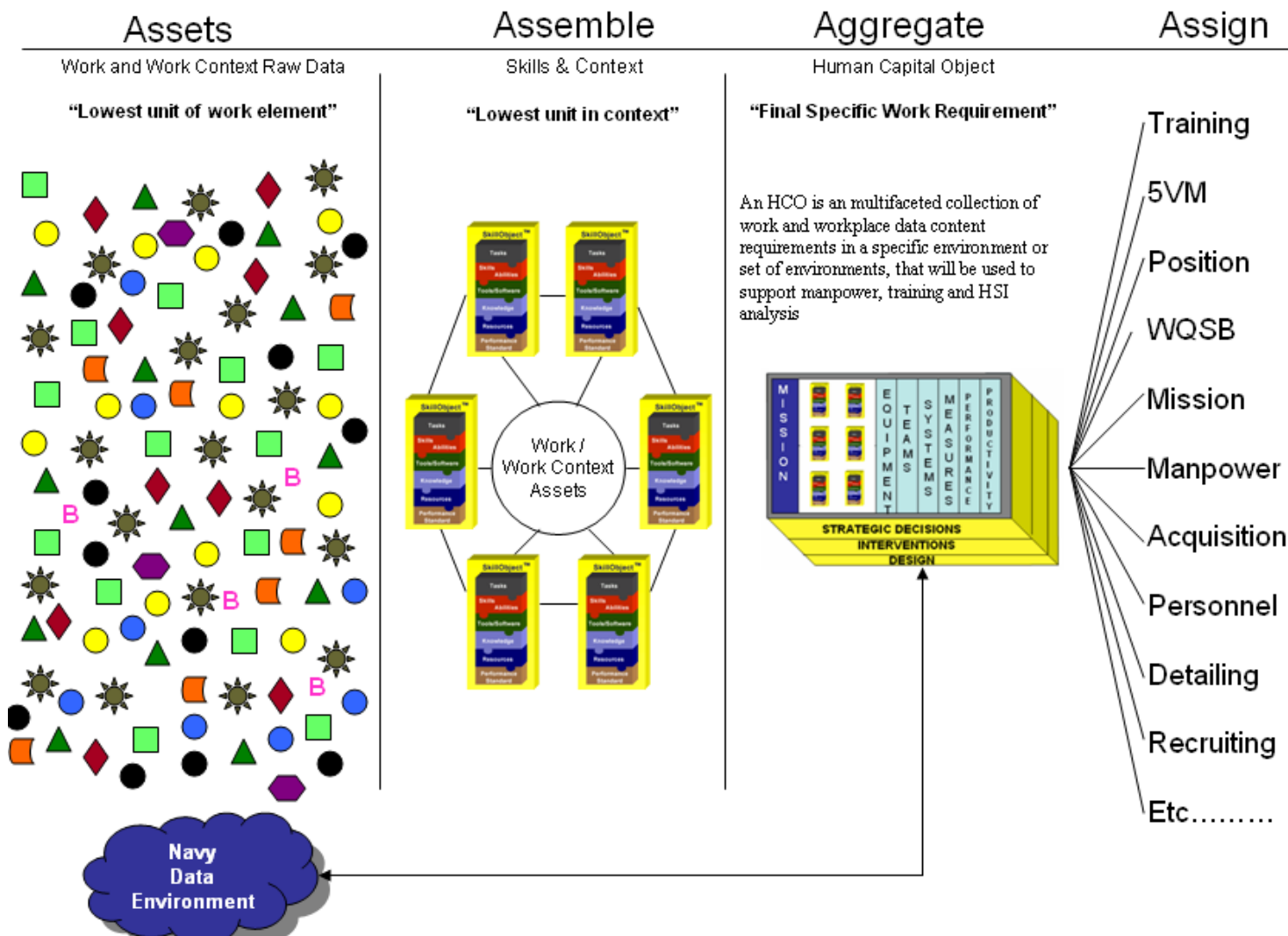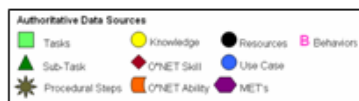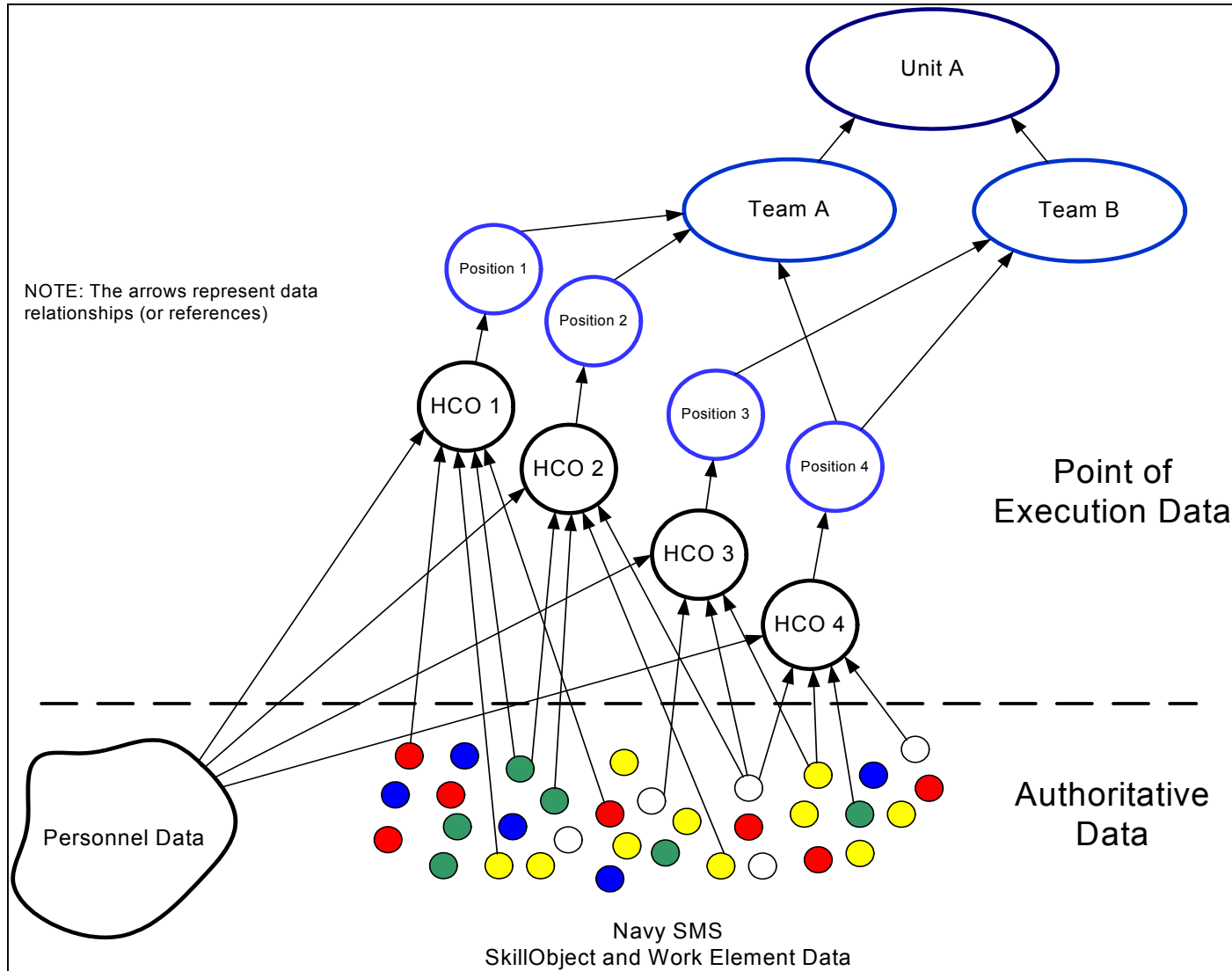
- Optimize HCO capability

- Increased interoperability/portability

- Prescriptive Surge Management

- Increased Career Satisfaction

Human Capital Content Formation Update

Essential Total Force Human Capital Strategy Content Products Status Dashboard

17 August 2005

Source: SkillsNET Corporation

Shore and Industry Jobs

Domain / Work Elements	Global Job Title: Administrative Support		
	Military	**Civilian**	**Industry**
Classification	YN1 Administrative Supervisor	GS-0318: Secretary HPC	Administrative Supervisor
SkillObject	Correspondence Management	Correspondence & Reports	Manage Correspondence
Core Task	Manage Command Files	Maintains Office Records	Maintains Filing Systems
Primary Knowledge	Knowledge of clerical procedures such as managing files and records	Knowledge of priorities, Duties, policies and program goals to maintain files and records	Knowledge of clerical procedures such as managing files and records
Primary Skill	Information Gathering	Plan & Organize Work	Information Gathering
Secondary Skill	Reading Comprehension	Use of English Language	Reading Comprehension
Primary Ability	Written Expression	Ability to interpret and apply rules	Written Expression
Secondary Ability	Oral Expression	Oral Communication	Oral Expression
Unique Knowledge	Administrative Procedures		Problem solving principles and history of solving similar problems.
Tools/Software	Microsoft Word	Microsoft Word	Microsoft Word
Resources	Correspondence Manual	Correspondence Manual	Customer Satisfaction Manual

Commonality = Productivity Gains

The <u>Content</u>, <u>Container</u>, <u>Context</u> Grand Challenge

→ Content defining work must be valid, trusted, and current.

→ HCO Container must have "just enough" information and flexibility to configure content to meet hybrid work environments.

→ Context is all about alignment.

- iDAP Data Source

- HCO-Builder (Spiral 1)

Questions?